

## ECAT Pre General Science Physics Chapter 18 Electronics Online Test

Sr	Questions	Answers Choice
1	Conversion of A.C. into D.C. is called:	A. Rectification B. Amplification C. Electric induction D. Magnetic induction E. None of these
2	If both the inputs given to a gate are 1 such that the output is 0, then it is:	A. AND gate B. NOR gate C. OR gate D. NOT gate E. Both (A) and (C)
3	Truth table of logic function:	A. Summarizes its output values B. Tabulates all its input conditions only C. Display all its input/output possibilities D. Is not based on logic algebra E. None of these
4	To designate the voltage as low or 0 by a logic gate, the specified minimum value is:	A. 0.2 volt B. 0.8 volt C. 0 volt D. 2.0 volt E. 5.0 volt
5	Op-amp has been discussed as comparator of:	A. Distances B. Voltages C. Velocities D. Magnetic fields E. Both (A) and (C)
6	To turn the transistor OFF, the base current is set:	A. At maximum value B. At zero C. Either (A) or (B) D. All are correct E. None of correct
7	In AND gate, the output is 1 if:	A. Both inputs are 0 B. Both inputs are 1 C. Only one input is 0 D. Both (A) and (B) E. Both (A) and (C)
8	A digital system deals with quantities which has discrete values:	A. Two in number B. One in number C. Three in number D. Four in number E. None of these
9	The number of input terminals of an op-amp is:	A. One B. Two C. Three D. Four E. None of these
10	An electronic computer is basically a vast arrangement of electronic switches which are made from	A. Resistors B. Transistors C. N-type crystals D. P-Type crystals E. Capacitors
11	To display a digit of EIGHT, the number of ON LED'S are:	A. Two B. Three C. Five D. Seven E. Eight
12	To make an LED, it is impracticable to use:	A. Silicon B. Gallium arsenide C. Gallium arsenide phosphide D. Iron E. Both (B) and (C)
		A. Common emitter circuit B. Common collector circuit C. Common base circuit D. All of these E. None of these

13	In the text book, the transistor amplifier circuit is a:	B. Common collector circuit C. Common base circuit D. Any of these E. None of these
14	A transistor has:	A. One region B. Two regions C. Three regions D. Four regions E. None is correct
15	The number of LED'S needed to display all the digits is:	A. Four B. Five C. Nine D. Six E. Seven
16	A diode which can turn its current ON and OFF in nano seconds is called:	A. LED B. Photodiode C. An ordinary diode. D. Both (A) and (B) E. Both (B) and (C)
17	In full wave rectification, simultaneous action is that:	A. Two diodes conduct and two do not. B. One diode conduct and three do not. C. Three diodes conduct and one does not. D. All the four diodes conduct E. None of these
18	In reverse-biased p-n junction, the reverse current is due to flow of:	A. Minority charge carriers B. Majority charge carriers C. Free electrons from p to n-region D. Holes from n to p-region E. all are true except (B)
19	In the forward biases situation, the current flowing across the p-n junction is a few:	A. amperes B. Milli amperes C. Micro amperes D. Pico amperes E. None of these
20	A potential barrier of 0.7 V exists across p-n junction made from:	A. Germanium B. Silicon C. Arsenic D. Gallium E. Indium
21	A hole in p-type may be due to:	A. Trivalent impurity B. Breaking of some covalent bond C. Pentavalent impurity D. Germanium E. Either (A) or (B)
22	Majority charge carriers in the p-region of p-n junction are:	A. electrons B. positrons C. Holes D. Neutrons E. None of these
23	All the valence electrons present in a crystal of silicon are bound in their orbits by	A. Ionic bond B. covalent bond C. Molecular bond D. Both (A) and (B) E. Both (B) and (C)
24	Crystal of germanium or silicon in its pure form at absolute zero acts as:	A. A conductor B. A semiconductor C. an insulator D. Both (A) and (C) E. Both (A) and (B)
25	The use of chips in electronics is described in the form of:	A. Yellow boxes B. Black boxes C. Red boxes D. White boxes E. Orange boxes
26	Silicon is one of the most commonly used:	A. conductor B. Dielectric C. Insulator D. Semiconduction E. Both (B) and (C)
27	Field lines are closer to each other in the region where the field is	A. Stronger B. Weaker C. Much weaker D. Absent

D. Absent  
E. None of these

28 Electric field lines emerge from the charges in

- A. One dimension
- B. Two dimensions
- C. Three dimensions
- D. Four dimensions
- E. None of these

29 The value of relative permittivity of different dielectrics are

- A. Equal
- B. Different
- C. Greater than one
- D. Smaller than one
- E. Both B and C

30 By placing a dielectric in between the charges, the electrostatic force between them

- A. Is always reduced
- B. Is always increased
- C. Is not affected
- D. Is increased one million times
- E. None of these